

Informal Observations of WTP Air Quality Issues
July 25, 2008
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On Tuesday, July 22, 2008, Jeff Bruggeman and I performed an informal walkthrough inspection aimed at identifying any systemic indoor air quality (IAQ) issues at the WTP construction site.

The precipitating event for this inspection was the arrival of six employees at the WTP Occupational Medicine Clinic (OMC) on July 15, 2008, complaining of health symptoms related to dust exposure. The six employees were two groups of three from different buildings, with different issues. A separate issue relating to IAQ at the LAW building, as outlined in a report issued June 18, 2008 (document # 24590-WTP-RPT-SA-08-003, Rev 0), had previously been investigated.

Issue 1

An impromptu lay-down yard had been set up to rework some beams that had to be taken out of the pre-treatment (PT) building, altered, cleaned with abrasive blasting, and re-installed. The yard was between the PT building and the Lab. During the 3-4 week long activity, dust would at times enter the Lab building causing irritation to some of the workers. The two workers I interviewed said that they complained to management but that nothing was done about it. Supervision says that air samples taken throughout the site, as well as at the lay-down yard, showed that no-one was being exposed over any regulatory limits. The limited amount of data that I reviewed was in agreement. The activity is now finished.

Issue 2

Carpenters disassembling scaffolding after an abrasive blasting activity was finished inside the PT building decided not to use any respiratory protection during the second half of the day. There was still some dust trapped in corners of the scaffold (this is typical). At the next morning's pre-job meeting three of the carpenters were talking together and spoke off-hand about having a headache or other malaise the previous evening. At this point they went to OMC for evaluation. Site supervision reported to me that all of the workers involved in both of these issues were returned to work the same day with no medical findings from the OMC.

General IAQ

The two affected employees from "Issue 1" that I interviewed said that the general air quality in the Lab was "OK", and that their only issue had been the temporary blasting operation outside. Jeff and I toured all four of the major buildings under construction on the site. We observed multiple fans and misters, spot air-conditioners, outdoor air intake

blowers, purposeful openings to the exterior in walls and roofs, through-the-floor fans, and spot-ventilators with HEPA filters. We went on several levels and into different workspaces within the buildings. Everywhere we went I could feel air movement and the air felt fresh.

An abrasive blasting operation was taking place on the outside wall of the PT building while I was there. I could see some dust escaping the containment but it was visibly below the regulatory nuisance dust limit (see photo 3). I spoke to the attending IH technician, he was taking four area air samples and a personal sample on the worker stationed nearest the containment. I reviewed the MSDS for the abrasive being used (this is the same abrasive that is used site-wide and involved in the above issues) and it is free of crystalline silica and metals and categorized as a simple nuisance dust.

Conclusion

I did not identify any systemic problem. Both of the most recent issues were short-term and appeared to involve simple irritation with no lasting health implications. Neither issue had to do with the general indoor air quality of any of the buildings, which seemed very good the day I was doing the walkthrough.

Recommended continuous surveillance includes further review of pertinent air-testing data, sampling plans, and relevant medical reports.

Photos attached

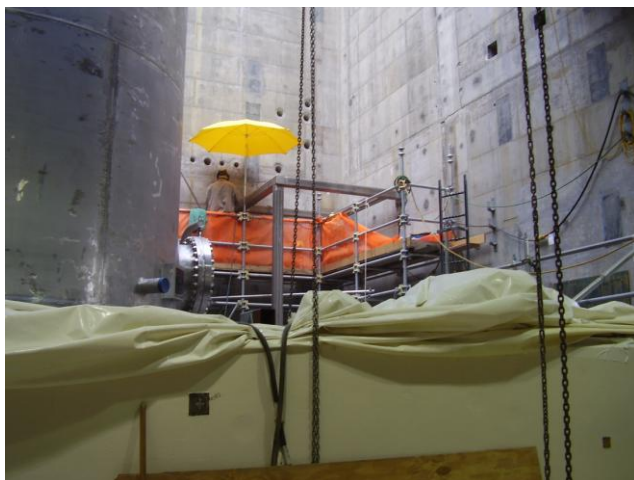


Photo 1: Pre-treatment building scaffolding



Photo 2: Temporary lay-down yard



Photo 3: Abrasive blasting enclosure



Photo 4: Outdoor air intakes



Photo 5: Welding ventilator



Photo 6: Spot air-conditioner